and in a meeting-house; they were led to this by their ultra-Protestantism.

"Let us take warning from their example, and, instead of rushing into the opposite extreme, take care that our admiration of Gothic churches does not lead to mediæval taste, which will end in Romanism. Why are our architects to be mere servile imitators of their predecessors? Why are they to have no scope for genius? Surely we ought, acting on primitive principles, to encourage their inventive powers; we ought to say to them, 'As Gothic architecture was at its excellence in the 14th century, you ought to master the principles of your art from the ancient models; and then, having studied your Prayer Book, you ought to apply those principles to the production of an edifice, in which the services of the existing Church of England may be performed in the beauty of holiness.' Even with respect to galleries, they are unsightly objects, but they are sometimes necessary. In the 14th century, when the ritual was in a dead language, the people assisted, but took no part in the service. The ritual has now been translated into the vulgar tongue, that all the congregation may hear, and bear their part in the services. While, in mediæval churches, ample space was required for processions, we, on the contrary, require to have many people accommodated in the smallest possible space. Where this can be done without galleries, every one will desire to dispense with them; but practical men will be unwilling to remove them entirely, until our architects have seriously considered whether they cannot be made ornamental as well as useful."

I have met with a passage to the same effect in the good but quaint old Fuller, under the title of "The True Church Antiquary," in chapter 6 of the Holy State, and I hope you will allow it to be a pendant to the extract from Dr. Hook.

"THE TRUE CHURCH ANTIQUARY."

"He is a traveller into former times, whence he hath learnt their language and fashions. If he meets with an old manuscript, which hath the mark worn out of its mouth, and hath lost the date, yet he can tell the age thereof either by the phrase or character.

He baits at middle antiquity, but lodges not until he comes at that which is ancient indeed. Some scour off the rust of old inscriptions into their own souls, cankering themselves with superstition, having read so often *orata pro animâ*, that at last they fall a-praying for the departed, and they more lament the ruine of monasteries than the decay and ruine of monks' lives, degenerating from their ancient piety, and painfulness. Indeed, a little skill in antiquity inclines a man to Popery, but depth in that study brings him about again to our religion. A nobleman who had heard of the extreme age of one dwelling not farre off, made a journey to visit him, and finding an aged person sitting in the chimney corner, addressed himself unto him with admiration of his age, till his mistake was rectified: for '*Oh Sir*' (said the young old man), '*I am not he whom you seek for, but his sonne; my father is further off in the field.*' The same error is daily committed by the Romish Church, adoring the reverend brow and grey hairs of some ancient ceremonyes, perchance but of some seven or eight hundred years' standing in the church, and mistake these for their fathers, of farre greater age, in the primitive times."

I am, Sir, &c., A LAYMAN.

Liverpool, 31st May, 1847.

JOHN FLAXMAN.—In 1843, Mr. Watson commenced a full-sized portrait-statue of this great sculptor. The clay model was so highly approved by a number of noblemen and gentlemen, that they opened a subscription, and formed themselves into a committee for the purpose of making the model a permanent marble statue. The clay has been transformed to plaster, and considerable progress has been made in the marble. The likeness of Flaxman is said to be good, and the sitting attitude easy and graceful: we have not yet seen it.

A NON-CONDUCTOR.—A thickness of half an inch of clay and sand has been found to intercept the heat of a mass of eleven tons of white-hot melted cast-iron for twenty minutes, without the heat on the outside of the vessel being sufficient to pain the hand.

THE GAS MOVEMENT.

RETROSPECTS AND PROSPECTS.

ONE astonishing peculiarity in the manufacture of gas is the fact, now more and more clearly evolving and forcing itself into notice, that, for every separate outlay, there is not only a separate compensation, but an additional profit;—that every step in the process of manufacture, not only pays itself, but more than pays itself; or, at least, that by means of patented or other improvements, of which every Gas Company has it in its power to take advantage, there not only need be no positive loss on a single article or process used, but there may or can be a positive gain on one and all.

Thus, for instance, the coal whence the gas is evolved, in being consumed into coke, especially on Mr. Cox's patented process, not only comes out without diminution, but with a positive increase, of its previous value, coal shovelled into the retort at 8s. 6d. a ton, as in Liverpool, coming out to be sold at no less a sum than 23s. 6d. a ton! (*a*)

Thus, too, for instance, in the purification of the article, especially on Mr. Johnston's patented process, not only is there no positive loss, the gas tar, ammoniacal liquor, gas salts, &c., being all valuable and saleable; but, on the latter process, so immensely increased in value, that the patentee offers not only to grant a free license to all companies using that patent, but actually to supply them with all the purifying materials, and that on the mere condition of ridding them of the residue, after the gas has been purified and prepared by passing through it! (*b*)

Then, too, as remarked by a correspondent, even the very "clinkered fire-brick-work of the benches and the burnt out retorts might find a market." (*c*)

But more than that, where coal may not be so easily or cheaply had, or where coke may not be so profitable,—though where *that* may be, in these times of general railway and steam power ramification, and consequent locomotive and other steam engine consumption, it is not so easy to notify as the reverse would be,—by means of Radley's patent, gas may be made even from bones or animal matter, hitherto unproductive for such purposes, and that, too, of a quality "superior to any ever made in the metropolis," at a cost of less than 4d. per 1,000 cubic feet! And here, also, the residual products are extremely valuable. (*d*)

In short, it requires very little foresight to perceive, as we have ere now predicted, that "there are financial wonders here to be opened up to us nearly akin to, and no less astonishing than, those statistical and economical subversions of all common notions that are thought to be on the eve of realization, by chemical and other companies, for the profitable disposal of the old and venerable nuisance of sewage and manure." (*e*)

And although some of the patent or other economical processes, here partially pointed out, are new or recent, the old gas companies are certainly quite inexcusable in not having yet given the public the benefit of such processes, some of which, without a doubt, they have fully appropriated to themselves since the antiquated era when gas was 30s. per 1,000 cubic feet. Is it not manifest, indeed, and that, too, even on the most moderate view of the matter, that while the coke consumer pays for the raw material, and the agricultural or other chemist for the preparation or purification of the gas produced from that material, the gas company have actually nothing in the shape of outlay or expenditure with which they can justly charge the gas consumer at all, except with the interest on capital sunk, once for all, at the outset, in the construction of their gas-works, and the ramification of their pipes, and with the wages paid to their officers and workmen for labour expended in carrying on their work! The public expectation, they may depend upon it, will not brook much more delay in any quarter. A significant index to the growing public opinion may be plainly deduced from the fact, that while not long before we opened the present campaign against the monopoly of gas, "*only* 7s. per 1,000 cubic feet" was a very ordinary turn of expression; now we happen to cast our eye on an intimation circulating in the usual course through the newspaper press, that the "*enormous charge* of 7s. per 1,000 cubic feet" is made by one gas company, namely, the Wigan, though we needed scarcely to have specified which, since it is not the Wigan company alone that make both enormous charges and enormous profits on what has thus been clearly proved to cost them, for material, literally NOTHING.

One future result to which we looked forward in the universal extension of the use of cheap and good gas, as "the nearest possible approximation to the purity and clearness and the cheapness and diffusion of the light of day," was the substitution of it in place of coal, wood, or peat fires, with all their disagreeable adjuncts of dust, smoke, sulphur, &c.; and it is already a satisfaction to us to find the public mind preparing itself, as it were, for such "financial wonders," as in a recent observation by the *Liverpool Albion*, of the fact, that the recent publication of the evidence on the subject of the supply of gas "would shew that we are merely in the first stage of the use of it,—that we are children in our knowledge of its benefits for purposes entirely apart from lighting,—and that the question of gas has ceased to be exclusively a question for those who burn it for illumination. It has become a question affecting us in various departments of household economy and convenience, and will become a primary question on the score of public health. We have it on the testimony of Mr. Herapath (the Bristol chemist), that with gas at 3s. 8d. (and on the *present* consumption of Liverpool it ought to be 3s.), it would be as extravagant as it is annoying to employ coal-fires in dwellings for cooking and warming, and that its general use will render the atmosphere of towns nearly as pure as that of the country. The popular demonstration of these facts (and there could be none more popular than by the publication of Mr. Herapath's evidence) would be productive of invaluable benefit; and the gas companies themselves could not more effectually serve their own interests than by the general 'diffusion' of such 'useful knowledge.'"

The following statistical information, extracted from the *Pharmaceutical Times*, may be considered with reference to what we have occasionally said about the metropolitan gas:—"At the present time there are in London alone fifteen gas companies, having mains laid in the various streets to the extent of several hundreds of miles, supplying above three thousand millions (3,000,000,000) of cubic feet of gas, requiring for its production more than three hundred and thirty thousand (330,000) tons of coals. It appears, from evidence given before a commission on a parliamentary inquiry respecting the 'Dublin Consumers Gas Company Bill,' in February last (1847), that there are in that city two gas companies, having consumed during the year 1846 twenty-seven thousand and thirty-five (27,035) tons of coal, producing about two hundred and forty millions (240,000,000) of cubic feet of gas. 'In the present day,' adds the writer, 'it is almost unnecessary to point out the advantages of lighting with coal gas. It is more economical, more safe, and more convenient than either lamps or candles; *and, as a system of police, its advantages cannot be over-rated; unlike the old oil-lamps of our streets, the burning gas really diffuses light, very much to the prevention of crime.*'"

We are pleased to observe, that the idea of binding down new companies to a maximum price in their Acts of Parliament has been adopted, as at Ashton, although it is notorious that "a coach-and-six may be driven right through many Acts of Parliament." Were assured and efficient means adopted, however, to limit companies to a certain moderate per centage of profit, they would soon be compelled to give the public the benefit of every available process, both old and new, for the reduction of the expense of its manufacture to the minimum. In fact, they ought to be limited, as we have just shewn, *at least* to such prices as would afford them a fair rate of interest on sunk capital, and repay them with interest the wages on labour expended.

Some conclusive experiments with Mr. Leslie's new burner, made by the parochial authorities of St. James's, to which we will refer next week, should make vestries pause before entering into fresh contracts.

We expect, ere long, to have some startling facts to disclose.

(a) See THE BUILDER, p. 85, ante. (b) See p. 109, ante.
(c) See p. 341, ante. (d) See p. 178, ante. (e) See p. 85, ante.